

The reticulate pattern is similar to that of *Penthalodes ovatus* (Koch), but *P. boneti* possesses dorsal and posterior setae whose lateral branches are short, whereas in *P. ovatus* the branches are fewer and may be as long as the main stem.

*Penthalodes turneri*, n. sp.

FIGS. 7, 8

*Female*.—Dorsum of body with V-shaped indentation; skin pattern of connecting hexagons over entire dorsum and entire venter. Palpi long, slender; segment I, 20 $\mu$  long; II, 40 $\mu$  long, with a median and a distal nearly semiplumose setae; III, 40 $\mu$  long, with a basal and two distal semiplumose setae; IV, 20 $\mu$  long, with apparently six short pilose setae. Shield over rostrum small, triangular, reticulate posteriorly and striate anteriorly. Anterior median tubercle of propodosoma with two short simple setae. Dorsal body setae almost semiplumose, with

three to five lateral branches; anterior dorsal setae 6-rayed; propodosomatic sensory setae pilose on distal half. Genital setae as in other species. Tarsi I and II as in other species. Length of body 286 $\mu$ ; including rostral shield 333 $\mu$ ; width about 214 $\mu$ .

The type female, U.S.N.M. no. 1701, a paratype and 4 other specimens were collected in peach-orchard soil, Stoddard County, Mo., September 25, 1936, by W. F. Turner. Other specimens were collected as follows: In soil, Tyler, Tex., November 23 and 24, 1939, and February 23, 1938 by L. D. Christenson; in soil, Denison, Tex., February 19, 1938, by L. D. Christenson; in soil, Menard, Tex., November 4, 1943, by O. A. Babcock; in rubbish in cottonfields, Batesburg, S. C., February 19, 1910, by H. F. Wilson.

This species is distinctive in that the reticulate pattern covers the dorsum and entire venter, and in the different type of dorsal body setae.

ENTOMOLOGY.—*Synopsis of the genus Nealyda Dietz, with descriptions of new species (Gelechiidae: Lepidoptera).*<sup>1</sup> J. F. GATES CLARKE, U. S. Bureau of Entomology and Plant Quarantine. (Communicated by C. F. W. MUESEBECK.)

The monobasic genus *Nealyda* was erected by Dietz<sup>2</sup> for *Nealyda bifidella* Dietz. Under the genus *Didactylota* Walsingham<sup>3</sup> described the West Indian *bicolor*. Busck<sup>4</sup> stated that this species was certainly referable to *Nealyda*, but the generic transfer was not made until 1925 by Meyrick.<sup>5</sup> In 1900 Busck<sup>6</sup> added two more species, *N. pisoniae* and *N. kinzelella*. Later Meyrick<sup>7</sup> described *N. accincta* and *N. leucozostra* and in this paper two new species, *neopisoniae* and *phytolaccae*, are added, bringing to a total of eight the number of described species in the genus.

With the exception of *bifidella*, which

ranges as far west and north as Washington State, the species are tropical or subtropical.

All the larvae so far known are leaf miners forming a blotch mine. Pupation occurs either inside or outside the mine, but the pupa always is in a flat, whitish or tinted cocoon from which it does not protrude at the time of emergence of the adult.

KEY TO THE SPECIES OF NEALYDA

1. Labial palpus conspicuously annulated . . . . . 2
- Labial palpus not so marked . . . . . 6
2. Head light colored . . . . . 3
- Head dark colored . . . . . 5
3. Dark fascia before middle of forewing dark brown to black . . . . . 4
- Dark fascia before middle deep velvety brown . . . . . *kinzelella* Busek
4. Tuft of scales on dorsum contrastingly darker than dark fascia . . . . . *pisoniae* Busek
- Tuft of scales on dorsum not darker than fascia . . . . . *phytolaccae*, n. sp.
5. Median light fascia of forewing with blotch of dark color in center . . . . . *neopisoniae*, n. sp.
- Median light fascia without such blotch of dark color . . . . . *bifidella* Dietz

<sup>1</sup> Received November 7, 1946.

<sup>2</sup> DIETZ, W. G., Ent. News 11: 350. 1900.

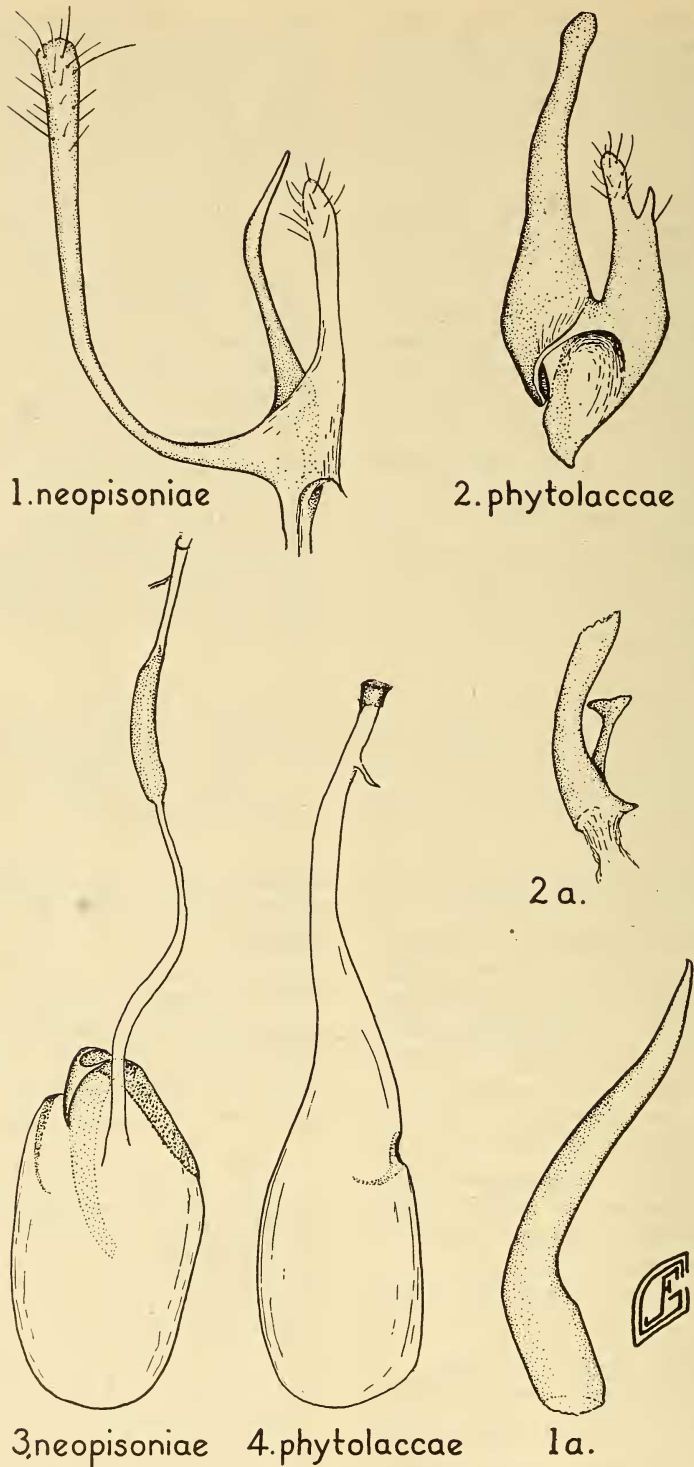
<sup>3</sup> WALSHINGHAM, LORD, THOMAS DE GRAY, Proc. Zool. Soc. London, 1891: 522.

<sup>4</sup> BUSCK, A., Proc. U. S. Nat. Mus. 25: 835. 1903.

<sup>5</sup> MEYRICK, E., in Wytsman, *Genera insectorum*, fasc. 184: 24. 1925.

<sup>6</sup> BUSCK, A., Proc. U. S. Nat. Mus. 23: 229, 230. 1900.

<sup>7</sup> MEYRICK, E., *Exotic Microlepidoptera* 3: 5. 1923.



FIGS. 1-4.—1-1a, *Nealyda neopisoniae*, n. sp.: 1, Inner surface of right harpe; 1a, aedeagus, lateral view. 2-2a, *Nealyda phytolaccae*, n. sp.: 2, Inner surface of right harpe; 2a, aedeagus, lateral view. 3, *Nealyda neopisoniae*, n. sp.: Ventral view of bursa copulatrix and ductus bursae. 4, *Nealyda phytolaccae*, n. sp.: Ventral view of bursa copulatrix and ductus bursae.

6. Fine, leaden, metallic lines before and beyond tornus.....*accincta* Meyrick  
No such metallic lines.....7
7. Basal half of forewing gray.*leucozostra* Meyrick  
Basal half of forewing fawn color.....  
.....*bicolor* (Walsingham)

*Nealyda phytolaccae*, n. sp.

Labial palpus black and white annulated. Antenna annulated black and white. Head pale luteous overlaid with fuscous. Thorax and tegula blackish fuscous to black basally shading to pale luteous. Forewing light yellowish brown basally shading to blackish fuscous or black slightly before middle where there is a sharp line of demarcation, with the lighter basal shade repeated followed by a gradual shading to blackish fuscous or black at apex; at apical fourth, on costa, a few whitish scales continue across wing as an ill-defined transverse line; cilia fuscous strongly overlaid with blackish fuscous and black. Hind wing and cilia fuscous; from costa, on underside of male, a yellowish hair pencil. Legs sordid white overlaid and annulated with blackish fuscous. Abdomen blackish fuscous above, paler beneath.

*Male genitalia*.—Dorsal lobe of harpe slender, slightly constricted before apex, extending beyond uncus; ventral lobe broad, about two-thirds the length of dorsal lobe, with divided distal end. Aedeagus slender, curved, simple. Vinculum with long, pointed, lateral processes.

*Female genitalia*.—Ductus bursae with a narrow sclerotized ring before ostium; inception of ductus seminalis well before ostium; signum a small, weakly sclerotized hook.

Alar expanse, 6–8 mm.

*Type*.—U.S.N.M. no. 58211.

*Type locality*.—Stock Island, Fla.

*Food plant*.—*Phytolacca decandra* L.

Described from the male type (21-III-1945) and eight male and eight female paratypes from the type locality and Bonefish Key, Fla., all showing March 1945 dates and reared from larvae collected by C. L. Griswold.

Paratypes in the United States National and British Museums.

This species is nearest to *N. pisoniae* Busck in genitalia but differs from it by the narrow

dorsal lobe and the divided ventral lobe of the harpe.

*Nealyda neopisoniae*, n. sp.

Labial palpus black and white annulated. Antenna black with white annulations. Head, base of thorax and tegula and extreme base of forewing blackish fuscous with minute white irrorations; remainder of thorax and tegula, and forewing to one-third, pale fawn; from basal third to middle and again at apical third are bands of dark golden brown separated by a fascia of pale fawn; in the center of this fascia is a blackish fuscous blotch with minute white irrorations; a dorsal tuft at center and the apical fourth of wing, including the cilia, also blackish fuscous. Hind wing and cilia very dark fuscous; from costa, on underside, in male, a white hair pencil. Legs blackish fuscous irrorated and annulated with white. Abdomen fuscous.

*Male genitalia*.—Harpe with dorsal arm divided, U-shaped; one element extending beyond uncus, dilated distally, the other element shorter, sharply pointed; ventral lobe fleshy, weak, about one-half the length of the long dorsal element. Aedeagus long, curved, simple, pointed. Vinculum divided into two broad posterolateral processes.

*Female genitalia*.—Ductus bursae with a sclerotized area from middle to posterior fourth; inception of ductus seminalis well before ostium. Signa a large three-pointed curved plate and a short narrow sclerotized lateral plate.

Alar expanse, 6–7 mm.

*Type*.—U.S.N.M. no. 58212.

*Type locality*.—Jaimanitas, Habana Province, Cuba.

*Food plant*.—*Pisonia aculeata* L.

Described from the male type, one male and two female paratypes as follows: Jaimanitas, Habana Province, two males (22-25-IV-1934, A. R. Otero); Central Jaronú, two females (25-XI-30, L. C. Scaramuzza).

This species can be distinguished from all other members of the genus by the divided dorsal element of the harpe and the large signum.